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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/513,065 | 02/24/2000 | Chi-Pei Michael Hsing | ST9-99-167 | 5699 |

7590 04/01/2004
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| EXAMINER |
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KIM, JUNG W

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| ART UNIT | PAPER NUMBER |
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2132

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DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/513,065

Applicant(s)

HSING ET AL.

Examiner

Jung W Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-36 have been examined.

Response to Amendment

2. Examiner withdraws the objection to the title as the amended title overcomes the objection.
3. The Declaration filed on February 5, 2004 under 37 CFR 1.131 is sufficient to overcome the Lai reference. However, in reconsideration of the present prior art, the claims presented by the applicant are found to be unpatentable over Stallings in view of Bryant and Wu as outlined below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 8, 10-16, 20, 22-28, 32, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stallings Cryptography and Network Security 2nd Edition (hereinafter Stallings) in view of Bryant "Designing an Authentication System: a Dialogue in Four Scenes" (hereinafter Bryant). The user authentication method, as

claimed by the applicant, reads into basic trusted third part authentication methodologies using encrypted credentials or certificates for user verification, which is provided by the third party. Kerberos, an authentication service developed as part of the Athena project at MIT, is one of the better-known and implemented services that follow this authentication format. The features of Kerberos are more comprehensive than the invention claimed by the applicant, but, in spirit, the applicant's invention follows the same procedure to authenticate a user to a service. Stallings predicates the disclosure of the Kerberos authentication service with a description of a simple authentication procedure to provide an overview of the general structure of Kerberos. This simple authentication dialogue substantially covers the claimed invention.

6. As per claim 1, Stallings discloses a simple authentication dialogue that uses a central authentication server to log a client onto a network of distributed services (see Stallings, page 326, 'A Simple Authentication Dialogue'). This simple authentication dialogue uses a centralized server to securely identify users by obtaining information from the user and then sending a ticket back to the user, which comprises of an encrypted message containing the identification of the client, the network address of the client, and the identifier of the service. This generated ticket, in addition to an identifier of the client, is sent to the service, whereupon, the service decrypts the ticket and compares the identification with the parsed identification. Since only the authentication server and the service share the private encrypted key, only the authentication server could have encrypted the ticket when issued to the client. Hence, if the parsed id

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matches the id sent by the client, then the request is accepted (see Stallings, page 326, steps 1, 2, and 3). Stallings does not explicitly disclose that the ticket contains both a username and a computer identifier to authenticate a parsed username and parsed computer identifier. However, other disclosures of the Kerberos system that detail the makeup of the issued tickets specify the use of a computer identifier in addition to the username. Bryant discloses the inclusion of a workstation address in the ticket issued by the Kerberos authentication method to prevent an unscrupulous workstation from intercepting an issued ticket to a valid workstation and using the ticket to access the service under the guise of the valid workstation (see Bryant, page 5, especially 8th paragraph "Athena:"). It would be obvious to one of ordinary skill in the art at the time the invention was made, for the identity of a user during a session to comprise a username and a computer identification as taught by Bryant in the simple authentication dialogue as taught by Stallings. Motivation for such an implementation would enable the invention to prevent identity duplicity by ascertaining a user by a unique name and a computer identifier. As such, the invention covered by Stallings comprises the following steps of:

- a. receiving an authentication key, a user name, and a computer identifier (see Stallings, page 326, 3rd paragraph, step 3 as modified by Bryant, page 5, especially 8th paragraph "Athena:"); wherein the authentication key is effectively the Ticket, the user name is the user id, and the computer identifier is the workstation address);

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- b. parsing the authentication key to obtain a parsed user name and computer identifier (see Stallings page 326, 4th paragraph; 2nd sentence; definition of "Ticket");
- c. validating the received user name and computer identifier using the parsed user name and computer identifier (see Stallings, page 326 2nd sentence as modified by Bryant, page 5, especially 8th paragraph "Athena:").

The aforementioned covers claim 1.

7. As per claim 2, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 1 rejection under 35 U.S.C. 103(a). In addition, the validating step comprises determining whether the received user name and computer identifier match the parsed user name and computer identifier (see Stallings, page 326, step 3; final paragraph).

8. As per claim 3, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 2 rejection under 35 U.S.C. 103(a). In addition, a match indicates that the received user name and computer identifier are valid (see Stallings, page 326, step 3; constitution of 'Ticket'; final paragraph).

9. As per claim 4, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 1 rejection under 35 U.S.C.

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103(a). In addition, the method further comprises, before parsing, decrypting the authentication key (see Stallings, page 326, final paragraph).

10. As per claim 8, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 1 rejection under 35 U.S.C.

103(a). In addition, the method further comprises generating the authentication key (see Stallings, page 326, third paragraph; step 2).

11. As per claim 10, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 8 rejection under 35 U.S.C.

103(a). In addition, the method further comprises encrypting the authentication key (see Stallings, page 326, third paragraph).

12. As per claim 11, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 8 rejection under 35 U.S.C.

103(a). In addition, the method further comprises forwarding the authentication key to a user (see Stallings, page 326, third paragraph).

13. As per claim 12, it is a method claim corresponding to claims 1-3 and it does not teach or define above the information claimed in claims 1-3. Therefore, claim 12 is rejected under Stallings in view of Bryant for the same reasons set forth in the rejections of claims 1-3.

14. As per claims 13-16, 20, and 22-24, they are apparatus claims corresponding to claims 1-4, 8, and 10-12, and they do not teach or define above the information claimed in claims 1-4, 8, and 10-12. Therefore, claims 13-16, 20, and 22-24 are rejected under Stallings in view of Bryant for the same reasons set forth in the rejections of claims 1-4, 8, and 10-12.

15. As per claims 25-28, 32, and 34-36, they are article of manufacture claims corresponding to claims 1-4, 8, and 10-12 and they do not teach or define above the information claimed in claims 1-4, 8, and 10-12. Therefore, claims 25-28, 32, and 34-36 are rejected under Stallings in view of Bryant for the same reasons set forth in the rejections of claims 1-4, 8, and 10-12.

16. Claims 5, 6, 7, 9, 17, 18, 19, 21, 29, 30, 31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stallings in view of Bryant, and further in view of Wu et al. U.S. Patent No. 5,774,551 (hereinafter Wu). As per claim 5, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 1 rejection under 35 U.S.C. 103(a). Stallings is silent on the matter of logging on to a server with a server identifier and server password once the user identifier and computer identifier are authenticated. However, authentication means based on a unified login method wherein access into a service is enabled by the above means is found in a plurality of devices including one disclosed by Wu. Wu

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teaches a method of logging in to a plurality of services, each with their own authentication restrictions, by means of a primary authentication module, wherein once a user is authentication by this primary authentication module, access to the individual services is enabled transparently (see Wu, col. 3, line 45-col. 4, line 2). It would be obvious to one of ordinary skill in the art at the time the invention was made to log an authenticated user to a server using a server user identifier and server user password. Motivation for such an implementation enables a unified login and hence simplification of the authentication requirements by the user to access a plurality of resources as taught by Wu (see Wu, col. 3, lines 50-55).

17. As per claim 6, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 5 rejection under 35 U.S.C. 103(a). In addition, the server user identifier and server user password is obtained by parsing the authentication key (see Wu, col. 3, lines 57-66; Figure 4).

18. As per claim 7, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 6 rejection under 35 U.S.C. 103(a). Stallings does not expressly disclose that a plurality of users share a server user identifier and corresponding password. However, the use of a shared user identity to logon to a service is notoriously well known in the art. Shared user identities include a range of roles, which cover everything from a default user or guest user for restricted access, to an administrator or root user for privileged access. Examiner takes Official

Notice of this teaching. It would be obvious to one of ordinary skill in the art at the time the invention was made for a plurality of users to share a server user identifier and corresponding password. Motivation for such an implementation enables a simple means to classify user access.

19. As per claim 9, Stallings covers a method of providing security for a computer connected to a data store as outlined above in the claim 7 and 8 rejections under 35 U.S.C. 103(a). In addition, the primary and secondary tokens disclosed by Wu, which contain the primary authentication context and the secondary authentication context respectively, comprise the authentication key as claimed by the applicant. Hence, the limitation of claim 9 is covered by Stallings in view of Bryant and Wu.

20. As per claims 17-19 and 21, they are apparatus claims corresponding to claims 5-7 and 9 and they do not teach or define above the information claimed in claims 5-7 and 9. Therefore, claims 17-19 and 21 are rejected under Stallings in view of Bryant and Wu for the same reasons set forth in the rejections of claims 5-7 and 9.

21. As per claims 29-31 and 33, they are article of manufacture claims corresponding to claims 5-7 and 9 and they do not teach or define above the information claimed in claims 5-7 and 9. Therefore, claims 29-31 and 33 are rejected under Stallings in view of Bryant and Wu for the same reasons set forth in the rejections of claims 5-7 and 9.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W Kim whose telephone number is (703) 305-8289. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jung W Kim
Examiner
Art Unit 2132

Jk
March 22, 2004



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